

## Product datasheet for **TR320450**

### **PDK3 Human shRNA Plasmid Kit (Locus ID 5165)**

#### **Product data:**

Product Type:	shRNA Plasmids
Product Name:	PDK3 Human shRNA Plasmid Kit (Locus ID 5165)
Locus ID:	5165
Synonyms:	CMTX6; GS1-358P8.4
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	PDK3 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 5165). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001142386</a> , <a href="#">NM_005391</a> , <a href="#">NM_005391.1</a> , <a href="#">NM_005391.2</a> , <a href="#">NM_005391.3</a> , <a href="#">NM_005391.4</a> , <a href="#">NM_001142386.1</a> , <a href="#">NM_001142386.2</a> , <a href="#">BC015948</a> , <a href="#">BC015948.1</a> , <a href="#">BC038512</a> , <a href="#">NM_001142386.3</a> , <a href="#">NM_005391.5</a>
UniProt ID:	<a href="#">Q15120</a>
Summary:	The pyruvate dehydrogenase (PDH) complex is a nuclear-encoded mitochondrial multienzyme complex that catalyzes the overall conversion of pyruvate to acetyl-CoA and CO <sub>2</sub> . It provides the primary link between glycolysis and the tricarboxylic acid (TCA) cycle, and thus is one of the major enzymes responsible for the regulation of glucose metabolism. The enzymatic activity of PDH is regulated by a phosphorylation/dephosphorylation cycle, and phosphorylation results in inactivation of PDH. The protein encoded by this gene is one of the three pyruvate dehydrogenase kinases that inhibits the PDH complex by phosphorylation of the E1 alpha subunit. This gene is predominantly expressed in the heart and skeletal muscles. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2010]
shRNA Design:	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .



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**Performance  
Guaranteed:**

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at [techsupport@origene.com](mailto:techsupport@origene.com). Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).